

IN THE CLAIMS

Claims 1-8 have previously been cancelled without prejudice.

Claims 11-15 have previously been cancelled without prejudice as being drawn to a non-elected invention.

Please amend claims 9, 10, 16-19, 21, and 26-28.

Please enter the pending claims, including claims 9, 10, 16-28, as follows:

1. – 8. (Cancelled)

9. (Currently Amended) An apparatus comprising:

a platen;

a polishing pad disposed over said platen;

a segmented cathode disposed around edge of said polishing pad and between said platen and a rear surface of said polishing pad;

a slurry disposed on said polishing pad;

a wafer disposed on said polishing pad and said slurry, said wafer having a body that is electrically conductive;

a wafer carrier to hold said wafer;

a chiller or heater to circulate a fluid within said platen and within said wafer carrier;

a segmented anode disposed between a rear surface of said body of said wafer and said wafer carrier, said segmented anode being partitioned into small components that may be electrically adjusted separately to change polishing rates and polishing selectivities for different materials in a surface layer of said wafer;

an enclosure disposed around said platen and said wafer carrier;

a power supply to apply a voltage or current between said segmented cathode and said segmented anode; and

a computer to vary said voltage or said current to improve uniformity of said polishing rates and said polishing selectivities.

10. (Currently Amended) The apparatus of claim 9 wherein said surface layer of said wafer comprises a continuous and conductive surface layer.

11. – 15. (Cancelled)

16. (Currently Amended) The apparatus of claim 9 wherein said computer optimizes said polishing rates or said polishing selectivities for said different materials [[on]] in said surface layer of said wafer by varying said voltage or said current.

17. (Currently Amended) The apparatus of claim 9 wherein said computer varies said voltage or said current as a function of time.

18. (Currently Amended) The apparatus of claim 9 wherein said computer varies said voltage or said current as a function of temperature.

19. (Currently Amended) The apparatus of claim 9 wherein said computer varies said voltage or said current as a function of process parameter.

20. (Previously Presented) The apparatus of claim 19 wherein said process parameter comprises slurry flowrate.

21. (Currently Amended) The apparatus of claim 9 wherein said computer varies said voltage or said current as a function of tool parameter.

22. (Previously Presented) The apparatus of claim 21 wherein said tool parameter comprises speed of rotation of said platen.

23. (Previously Presented) The apparatus of claim 21 wherein said tool parameter comprises speed of rotation of said wafer carrier.

24. (Previously Presented) The apparatus of claim 9 wherein said computer comprises feedforward control of an electrochemical process.

25. (Previously Presented) The apparatus of claim 9 wherein said computer comprises feedback control of an electrochemical process.

26. (Currently Amended) The apparatus of claim 9 wherein said computer comprises proportional control of said voltage or said current.

27. (Currently Amended) The apparatus of claim 9 wherein said computer comprises differential control of said voltage or said current.

28. (Currently Amended) The apparatus of claim 9 wherein said computer comprises integral control of said voltage or said current.